

## Abstract

It is an object of the present invention to switch bands with a simple structure in which frequency bands can be individually switched respectively in a transmission and a reception and only a receiving part can be switched to another frequency band without disconnecting an upward line during communication.

The device of the invention includes an antenna (1) capable of transmitting and receiving radio waves of first and second frequency bands, a wave separator (2), antenna sharing devices (3A, 3B) respectively provided so as to correspond to the frequency bands, transmitting circuits (4A, 4B), transmitting PLL synthesizers (5A, 5B), receiving circuits (6A, 6B) and receiving PLL synthesizers (7A, 7B). A control part 102 controls, through a common three-line serial bus, the transmitting PLL synthesizers (5A, 5B), the receiving PLL synthesizers (7A, 7B), a transmitting band switching signal generating circuit (8) and a receiving band switching signal generating circuit (9) to individually switch the frequency bands respectively in the transmission and the reception.